Daring to DREAM: Results from a mentoring programme for at-risk youth

Katherine C. Meyer, Boston University, Boston, MA, USA
Heather A. Bouchey, University of Vermont, Burlington, VT, USA
Email: hbouchey@gmail.com

Abstract

Recent research and empirical investigations of mentoring programmes have focused on how mentors can help at-risk youth to develop trusting relationships through consistent frequency of contact and emotional closeness. Many mentoring programmes are also geared toward enhancing students' academic potential. This quantitative study examined whether participation in DREAM, a Northeastern United States, activity-based mentoring programme, was positively associated with children's physical self-efficacy; global self-esteem; academic self-concept and educational expectations and their interest in travel experiences. Self-report data were collected from participating mentors and mentees. The results indicated that adjustment outcomes for boys and children over ten evidenced the strongest pattern of links with mentors' reports.

Key Words: mentoring, at-risk youth, self-efficacy, self-esteem

Introduction

Mentoring is often used to refer to the relationship that is established between a caring extra-familial adult and a child or adolescent who comes from an underprivileged background (Zand, Thomson, Cervantes, Espiritu, *et al*., 2009). Such relationships are often facilitated through mentoring programmes that strive to match at-risk youth with positive role-models.

It is only in recent years that the investigation of mentoring programmes and how they may benefit *youth* has become an important topic for educational and psychological investigation (Dubois, Holloway, Valentine and Cooper, 2002). This interest has surfaced because of the important role that adults, other than parents, play in enhancing resilience among youth who come from "at-risk" backgrounds (Rhodes, 1994). Although there has been much interest in youth mentoring programmes, there is currently a substantial lack of empirical evidence on the *effectiveness* of such programmes for the youth they seek to help (Rhodes, 2002; Zand et al., 2009). The present study aimed to address this existing research gap by evaluating a mentoring programme focused on at-risk youth living primarily in rural poverty.

Background

Research on existing programmes that has been conducted to date has illustrated several important facets of a successful mentoring process. Firstly, those mentoring programmes that are situation focused and actively target youth who are vulnerable due to their present life circumstances (e.g., low socioeconomic status) have been found to have greater effectiveness in terms of preventative intervention (Cowen, 1985; Institute of Medicine, 1994 as cited in Dubois et al., 2002). These types of programmes have stronger effects than programmes in which children are randomly chosen from the population to participate in mentoring.

Secondly, successful mentoring involves the duration of the relationship between the mentor and youth. In a study by Grossman and Rhodes (2002), youth involved in the same mentoring relationship for a year or more reported improvements in school work, social relationships, and behavioral outcomes. However, youth in mentoring relationships that terminated within 3 months reported *decreased* levels of self-esteem and perceived academic competence as compared to ratings obtained before the mentoring began.

The third characteristic of mentors that predicts the duration of the mentor-mentee relationship is mentors' socioeconomic background. Research shows that mentors from families with higher income levels are more likely to have a sustained commitment because of the flexibility in their schedules and their ability to afford personal transportation, which increases convenience and ease of participation (Miller et al., 1990, cited in Grossman and Rhodes, 2002).

A fourth facet of successful mentoring programmes is matching the youth with a mentor of the same gender, race, and shared interests. Further, it is also important for the mentor and the mentee to clearly understand the expectations concerning how frequently they will be able to meet (Dubois et al., 2002).

Thus another issue that is important to consider within mentoring programmes is potential gender differences regarding effects on mentees. Specifically, Spencer and Liang (2009) note the lack of attention to this matter in the literature and explain why it is necessary to study females and males separately in mentoring research.

> *Given that female relationships are characterized by emotional intimacy, it has been suggested that girls may benefit from relationships with adult female mentors that emphasize self-disclosure and empathy, whereas boys are more likely to benefit from engagement in shared activities with adult men (Bogat and Liang 2005; Rhodes, 2002; Sullivan 1996)* (Spencer and Liang, 2009, p.111).

A final variable that was considered in the present study was the age of the mentees. This was examined separately because the children in the targeted mentoring programme ranged in age from early childhood (five years of age) to adolescence (16 years). Given the important

developmental differences and competencies at various stages during childhood and adolescents (Zand et al., 2009) age was an important factor to study.

In addition to the demographic and socioeconomic factors discussed above, mentors' perceptions of the mentoring process and relationship have recently been identified as important features to assess in mentoring research (Dubois *et al*., 2002). For instance, mentoring programmes have been found to have positive effects on at-risk youth because the mentors themselves are less likely to accept the pessimistic labels that have been given to these children and feel that the children are capable of achieving success despite their life events (Dubois et al., 2002).

Additionally, Rhodes *et al.* (2005) recommended that future research focus on identifying the factors that support continued mentoring including the characteristics of the volunteers who mentor over extended periods of time. The present study helps add to the data that exist in this field by assessing mentors' satisfaction and self-efficacy in their mentoring relationship. These mentor qualities are likely to be important and integral to the success of a mentoring programme, including how long mentors persist in their programme participation, so it is important to evaluate such perceptions.

This study not only focused the mentors' perceptions of how effective the mentoring programme was, but also examined how their self-efficacy as a mentor, their organizational and planning skills, and their views of the mentoring process itself related to mentees' outcomes. It is useful to focus on mentors' self-attributions with respect to the mentoring process because "mentor's provision of emotional support and positive feedback is expected to enhance adolescents' sense of self-worth" (Rhodes et al., 2005, p.32). Given the impact that the mentor's self-attributions can have on the mentee's self-perceptions, this is an important area to examine.

Mentees' self-perceptions are, of course, important outcomes because often, as in the case of this study, the primary purpose of the mentoring programme is to increase at-risk youths' (i.e., mentees') sense of self. This is critical because at-risk children are more likely to have lower levels of achievement and lower high school graduation rates (Redd, Brooks and McGarvey, 2002). Bandura and colleagues (2001) explain how perceived self-efficacy, a person's belief that they can bring about desired outcomes and persevere in the face of difficulty, is an influential contributor to academic achievement. Given that it is claimed that high school dropouts have lower levels of self-esteem and lower perceived self-efficacy (Meyer, Murphey and Weinbaum, 2002) and lower prior grades (Redd et al., 2002) this study examined these self-perceptions during childhood and adolescence. More specifically, we investigated *physical* self-efficacy (Harter, 1985) and expectations for travel because they were closely linked to the activities that children were engaging in with their mentors in the DREAM programme.

For the purposes of this study the following definitions have been used:-

Mentoring: A relationship that develops over time between a child and an adult based on consistent dyadic meetings outside the academic sphere, which serves to provide the child with emotional support and positive attention (Karcher, 2005).

At-risk youth: Children who come from economically underprivileged or low socioeconomic (SES) backgrounds; having, on average, less apparent family guidance and/or lacking positive role models (Dubois et al., 2002).

Self-efficacy: Individuals' attitudes that they can bring about desired outcomes and persist in times of problems (Bandura, Caprara, Barbaranelli & Pastorelli, 2001).

Self-esteem: Individual's sense of self-worth, including how good one feels about oneself (Harter, 1999).

Key Features of DREAM

Based on the aforementioned conceptual principles, this study investigated links between children's adjustment and mentor-mentee relationships in a well-established mentoring programme called DREAM: Directing through Recreation, Education, Adventure, and Mentoring. DREAM was designed in 1999 to give children living in public housing developments in the Northeastern United States an opportunity to develop new perspectives and take positive risks (www.dreamprogram.org). The researchers collaborated with the central office staff of DREAM Inc. to help evaluate if the programme's goals were being met. There are three specific goals that DREAM staff outline as central to their organization and that the present study focused on: (1) empowering mentees and increasing their perceived self-efficacy and self-esteem; (2) enhancing mentees' academic potential; and (3) broadening their world vision, which is a child's ability to understand how big the world is through having the children participate in field trips to new cities and states (Foote, personal communication, September 2002). These goals provided the foundation for the measures that were selected in the present study.

DREAM's mission is to "break the cycle of poverty for children living in low-income subsidized housing developments in the State of Vermont" (Foote, personal communication, August 2002). In keeping with their mission statement, DREAM involves the children in planning trips to places like Montreal, Boston, Washington D.C., and Colorado where the children are responsible for planning and fundraising; so they learn they are capable of accomplishing important things (Foote, personal communication, August 2002). The creators of DREAM hope engagement in these activities will enhance the child's perceived self-efficacy, their "capability to exercise some measures of control over one's own thought processes, motivation, affect and action" (Bandura et al., 2001, p.125). DREAM is a unique mentoring programme because its operation relies primarily on the college student mentors themselves.

An important aspect of this study is that it served to complement previous research conducted on mentoring programmes by incorporating a variety of quantitative measures—mentees' physical self-efficacy, global self-esteem, academic self-concept, educational expectations, and interest in travel experiences. The researchers hypothesized that the quality of mentoring in DREAM would be related to positive change in children's physical self-efficacy, self-esteem, academic self-concept, educational expectations and interest in travel over time. In addition, it was expected that mentees' gender/sex, age, and match with sex and/or race of mentors might moderate these linkages. For instance, participation in same-sex mentor/mentee dyads was predicted to evidence stronger links with mentees' adjustment outcomes, following previous research findings (see Dubois et al., 2002).

Method

Participants
The sample in this study consisted of three groups of children and their DREAM mentors. One group was from the Marsh[1] public housing development in Southeastern Vermont. These participants had been involved with DREAM for at least two years. The second group consisted of children from Northern Vermont who lived in the Cooper public housing development and had begun the DREAM programme only a few months prior to study participation (Gaines, personal communication, July 2002). The third group consisted of children from the Frank public housing development; they also had begun participating in DREAM within the past few months (albeit in Southeastern Vermont).

There were 80 mentees (ages 5-16), 53% of whom were female. Mentors were 76 college students (ages 18-25), 56% of whom were female. The ethnic makeup of the mentor sample was primarily Caucasian (69%, n=55), with 5% Latino/Hispanic, 5% mixed race, 1% African American, 1% American Indian, and 19% not reporting this information. Forty-six college students who attended a private postsecondary institution in New Hampshire and mentored at Marsh and Frank housing developments, and 30 college students who attended a public university and mentored at Cooper, were surveyed. With respect to family demographics, 38% (n=30) of mentors reported that their parents had received a Masters level education, indicating a relatively high socioeconomic status. In terms of mentor-mentee dyads, 79% (n=63) were of the same sex and 73% (n=54) were of the same race.

Attrition
As can be expected with research taking place over the course of six months (October to March) and involving a high-risk population, attrition was a factor in the study. Thirteen children (16%)

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[1] Names of housing developments and communities have been masked in this study to protect identities of all participants.

who participated at Time 1 did not complete the surveys at follow up. The reasons for attrition included eviction from the public housing development, moving out of the area, and removal from parental custody by state social workers.

Procedure
Paper and pencil questionnaires (see Appendix A) were administered to participating students by their mentors in October and again in March. The initial survey of the students in October helped establish baseline measures for the adjustment outcomes of interest. All mentors were instructed about the importance of this survey and told not to interfere with children's responses. The surveys were administered in different communities within a week of one another. In March, identical outcome surveys were again administered to mentees.

The mentors also completed a self-report questionnaire (see Appendix B) that asked about their basic demographic information (i.e., sex, race, socioeconomic status [SES]), their satisfaction with DREAM, their perceived self-efficacy regarding mentoring goals, and how they felt they were helping their mentees. The questionnaires were administered in February (midway through the project; i.e., after Wave 1 mentee outcomes were assessed) in order to allow time for the mentors to establish supportive relationships with their mentee and ostensibly better understand their role as a mentor.

Measures
Children's adjustment was assessed using four self-report measures (see Appendix A). The first measure comprised three items from Bandura's physical self-efficacy scale that assess the child's self-efficacy in sports and activities. Cronbach's reliability, an index of the internal consistency or reliability of a measure was .59 at Time 1 and .70 at Time 2.

The second measure was a modification of the global self-worth scale from the Self-Perception Profile for Children (SPP-C, Harter, 1985). This measure assesses children's overall self-esteem. Modification enabled children to answer items directly without the "some kid—other kid" format used in the original SPP-C. For this study, only the three positively worded items yielded acceptable reliability together, indicating that the negatively worded items were difficult for children to understand. Cronbach's reliability for this measure, comprised of averaging scores for the three items, was .64 at Time 1 and .71 at Time 2.

To assess academic self-concept, a modified version of the academic competence sub-scale of the SPP-C was used (Harter, 1985). This measure assesses children's views of themselves in the scholastic domain. As with the global self-esteem scale, only the positive items yielded acceptable reliability. Thus, the researchers averaged responses for these three items in the measure. Cronbach's reliability was .58 at Time 1 and .71 at Time 2.

The researchers also created a new set of items (based on Rojewski, 1995; and MSALT; see Wigfield, Eccles, Mac Iver, Reuman, et al., 1991) to assess children's future educational

expectations and the broadening of their world visions. This questionnaire asked the children how far they thought they would go in school, as well as how interested they were in traveling to new states and countries and the likelihood that they actually *would* travel to new states and countries.

The mentors also completed questions created by researchers for this project (see Appendix B). This 8-item measure was divided into three parts that assessed: (1) self-efficacy as a mentor based on mentors' abilities to motivate children with low interest, difficult children, and adverse community conditions, (2) perceptions of DREAM's effectiveness, and (3) perceived organizational/planning skills. Cronbach's reliability for self-esteem as a mentor was .73, for perceptions of DREAM's effectiveness was .84, and for organizational/planning was .79. To reduce the number of potential analyses, researchers created a global measure of mentor quality by averaging mentors' reports for self-efficacy, DREAM quality, and their own organizational skills. Intercorrelations among these three scales ranged from .53 to .57 (all $p < .001$). Cronbach's reliability for this combined scale was .78.

Results

Overview of Analyses
Mentor and mentee surveys were numerically scored and the data were entered into Statistical Package for the Social Sciences (SPSS). Initially, a series of descriptive analyses was conducted to examine whether there were differences on Time 2 outcomes based on community, mentees' sex, and mentees' age. Next, correlational analyses were conducted to examine the extent to which mentors' reports and features of the mentor relationship were linked to mentees' outcomes at Time 2. Finally, partial correlations controlling for baseline outcome measures were conducted to test whether mentoring was linked to *change* over time in mentees' adjustment. Additionally, the study examined whether mentees' sex, age, and/or the match between mentors' and mentees' sex and race was linked with mentees' adjustment over time. In sum, the goal of the data analysis was to discern whether mentoring aspects of DREAM were linked to children's outcomes, such as an increase in their perceived self-efficacy, self-esteem, and educational expectations.

Descriptive Analyses
As illustrated in Table 1, mentees' scores for physical self-efficacy, global self-esteem, and academic self-concept were moderately high and quite stable from Time 1 to Time 2. For example, the mean for physical self-efficacy at both Time 1 and Time 2 was around 5.6 (scored on an ordinal scale from 1 to 7), which indicates a relatively high physical self-efficacy score. It is also clear that global self-esteem remained high and stable across Time 1 and Time 2 at around 3.5 (scale range = 1 to 4). Finally, academic self-concept, with a mean of around 3.5 (scored from 1 to 4) for both times indicated that mentees felt, on average, academically competent.

The mentees' educational expectations (e.g., how far they thought they would go in school) remained fairly consistent from Time 1 to Time 2. On average, mentees indicated that

they hoped to complete some level of college. Also, the mentees' interest in travel was around 3.3 at Time 1 and Time 2 (between "somewhat" and "very likely") and their likelihood of traveling to new places was about a 3.0 ("somewhat likely").

	Time 1		Time 2	
	M	SD	M	SD
Variable				
Physical Self-Efficacy	5.65	1.24	5.55	1.39
Global Self-Esteem	3.53	.57	3.48	.65
Academic Self-Concept	3.40	.57	3.48	.56
Educational Expectations	4.53	1.52	4.39	1.67
Interest in Travel	3.32	.98	3.41	.96
Likelihood of Travel	3.13	.95	3.00	1.10

Table 1: Mean Scores and Standard Deviations for Mentees' Adjustment

	M	SD
Variable		
Self-esteem as mentor	4.74	.86
Perceptions of DREAM	5.80	1.07
Organizational skills	5.39	1.09
Mentor Quality (composite)	5.31	.84

Table 2: Mean Scores and Standard Deviations for Mentor Reports

As demonstrated in Table 2, the mentors' perceived self-efficacy was about average (scored on an ordinal scale from 1-7) with a mean of 4.74. The mean for mentors' perceptions of DREAM's effectiveness was a 5.8 (scored from 1 to 7) and their mean organizational skills was rated 5.4 (scored 1-7). For the overall mentor quality variable, the mean was a 5.31 (scored 1 to 7). Thus, mentors on average reported at least moderate self-efficacy and planning skills, as well as satisfaction with the DREAM programme.

Group Differences on Children's Outcomes
To explore whether mean levels of children's outcomes differed across sub-groups, a series of multivariate analyses of variance (MANOVAs) was run. Time 2 outcomes were entered as dependent variables and a variety of grouping factors as independent variables. Children's mean outcomes did not differ as a function of their gender (female or male), age (younger than ten versus older than ten), or community (i.e., Marsh, Cooper, Frank), nor did they differ as a

function of mentoring dyad sex-makeup or race make-up. In addition, a series of chi-square analyses did not reveal any associations among the frequencies of boys and girls, older and younger children, same- and mixed-gender dyads, or same- and mixed-race dyads in the sample. In other words, children seemed to be relatively evenly distributed across these groups in the sample (at least compared to what would be expected by chance).

Initial Correlational Analyses
Inconsistent with expectations, Pearson product-moment correlations for the sample as a whole revealed no significant relations between global mentoring quality and mentees' outcomes at Time 2 (see Table 3). To examine the extent to which mentees' gender and age may have *moderated* relations between mentoring quality and outcomes, correlational analyses were conducted separately for (1) girls and boys and (2) children younger then 10 (i.e., childhood) and children 10 and older (i.e., adolescence). The results for these analyses follow:

Girls
Analyses for girls revealed that their educational expectations at Time 2 were positively related to mentor's age ($r = .37$, $p < .05$), but such expectations tended to be lower if girls were paired with a female mentor ($r = -.33$, $p < .10$). In addition, meeting more times with one's mentor was positively related, at trend level, to girls' academic expectations ($r = .30$, $p < .10$). Neither the mentor's characteristics nor their perceptions of DREAM were related to female mentees' physical self-efficacy, global-self esteem, academic self-concept, or interest in traveling.

Boys
Correlations for the boys revealed that their global self-esteem was positively related to both mentor quality ($r = .47$, $p < .01$) and the number of times mentors and mentees met (at trend level; $r = .33$, $p < .10$). Their mentors' SES was also positively related to both the mentees' physical self-efficacy ($r = .51$, $p < .01$) and interest in travel ($r = .52$, $p < .01$) at Time 2. None of the mentoring variables assessed was related to boys' academic self-concept. However, if the boys had a male mentor they reported higher educational expectations ($r = .56$, $p < .01$). Also, participation in same-race, as opposed to mixed-race, mentoring dyads indicated a trend toward higher educational expectations ($r = .33$, $p < .10$).

Younger Children
Inspection of correlations for children who were younger than ten illustrated that the number of times they met with mentors was positively related to their global self-esteem ($r = .41$, $p < .05$) and, at trend level, their academic self-concept ($r = .38$, $p < .10$) at Time 2. When the mentor was a female, younger children reported higher (trend level) academic self-concept ($r = .36$, $p < .10$) but lower (trend level) educational expectations ($r = -.35$, $p < .10$). Surprisingly, mentoring quality was also negatively related to how far they wanted to go in school ($r = -.40$, $p < .05$). Consistent with the pattern for boys, younger mentees in same-sex mentoring dyads had higher educational expectations ($r = .49$, $p < .05$) than those matched with other-sex mentors. Finally, the higher mentors' socioeconomic backgrounds were, the lower were younger mentees'

educational expectations, at trend level ($r = -.36$, $p < .10$). There were no links between mentoring features and either interest in novel travel experiences or perceived likelihood of travel.

Source	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. mentse	--															
2. mentdrm	.53***	--														
3. mentorg	.53***	.57***	--													
4. menqul	.79***	.85***	.85***	--												
5. timesmet	.39**	.24*	.38***	.40***	--											
6. mentage	.12	-.05	.15	.09	.47***	--										
7. parented	-.07	-.07	-.05	-.07	-.11	.03	--									
8. samesex	-.15	-.25	-.15	.22+	-.10	.01	-.06	--								
9. samerace	.06	-.02	-.06	-.01	.03	.09	.09	.03	--							
10. mentsex	.15	.21+	.24*	.24*	-.14	-.24*	-.13	-.09	-.15	--						
11. sephys2	-.12	-.07	.17	.00	.13	.12	.30**	-.14	-.01	.04	--					
12. gse2	.04	.16	-.05	.06	.19	-.05	-.02	-.07	.10	-.04	-.03	--				
13. asc2	-.16	.09	.13	.04	.14	-.11	-.07	-.11	.07	.19	.32*	.44***	--			
14. farscho2	.04	-.06	-.09	-.05	.30*	.34**	-.24+	.19	.28*	-.24	-.14	.06	.11	--		
15. liketr2	-.10	-.12	.09	.05	-.04	-.15	.22+	.00	.21	.03	.38**	-.11	.09	.15	--	
16. intrstr2	.01	.01	.09	.05	.08	-.11	.22+	.07	.00	-.03	.30*	-.23+	-.05	.16	.59***	--

Table 3: Intercorrelations among study variables[2]

Older Children
Correlations for children who were ten and older indicated that the mentor's SES was positively related to mentees' physical self-efficacy ($r = .38$, $p < .05$) at Time 2. Mentees had higher global self-esteem if they were in same-race, as opposed to mixed-race, mentoring dyads ($r = .45$, $p < .01$). Analyses also revealed that the mentor's age and the number of times the mentor met with

[2] 1 =mentors' self-efficacy, 2= mentors' perception of DREAM, 3 =mentors' organizational skills, 4=composite measure of mentor quality 5= # times mentors met with mentees, 6= age of mentor, 7= mentors' parents' level of education, 8= mentor and mentee same sex, 9 =mentor and mentee same race, 10= mentors' gender, 11= mentees' physical self -efficacy, 12=mentees' global self-esteem, 13= mentees' academic self-concept, 14= educational aspirations, 15=mentees' likelihood of travel, 16= mentees' interest in travel. The # next to the variable indicates Time 2. + = $p < .10$,* = $p < .05$, ** = $p < .01$, *** = $p < .001$.

the mentee were positively related to older children's educational expectations ($r = .39, .32; p < .05, p < .10$, respectively). However, both the number of times mentors met with their mentees and the mentor's age were negatively related (at trend level) with older children's perceived likelihood of travel ($r = -.31, -.30, p < .10$ for both). Mentors' SES also showed a positive trend with mentees' interest in travel ($r = .30, p < .10$). No relationships were found between DREAM features and the older children's academic self-concept.

Partial Correlations
To examine whether mentoring was related to change in mentees' outcomes over time, a series of correlations that partialled out the effects of Time 1 baseline measures on Time 2 measures was run. This more stringent test reduced the strength of many correlations, but by and large the same patterns emerged; those partial correlations that remained significant are discussed below. First, it was important to establish that Time 1 outcomes were indeed related to Time 2 outcomes in the present study. Table 4 indicates moderate to high stability in mentees' adjustment across the two time points.

Girls
Partial correlations for the girls revealed that having an older mentor was associated with an increase over time in their educational expectations ($r = .37, p < .05$), but their educational expectations significantly decreased if they had a female mentor ($r = -.38, p < .05$). The relation between the number of times met with mentor and girls' educational expectations did not hold up after partialling out stability in Time 1 expectations.

Boys
For boys, higher mentor quality was positively linked to an increase in mentees' global self-esteem ($r = .46, p < .01$). Boys with male mentors showed an increase in their educational expectations from Time 1 to Time 2 ($r = .57, p < .01$). And boys who met more with their mentors reported, at trend level, higher global self-esteem at Time 2 ($r = .33, p < .10$). Finally, higher mentor SES was related to an increase in travel interest ($r = .56, p < .01$).

Younger children
Partial correlations for the children younger than ten illustrated that the number of times they met with their mentor was associated with an increase in global self-esteem ($r = .41, p < .05$). Also, if the mentor and mentee were of the same sex, then the mentee had higher educational expectations over time ($r = .45, p < .05$). However, both having mentors from higher socioeconomic backgrounds and experiencing higher mentor quality (as reported by mentors) was associated with a decline in mentees' educational expectations over time ($r = -.43, -.41$, respectively; $p < .10$ for both).

Older children
Partial correlations for the children older than ten illustrated that having an older mentor was associated with higher educational expectations over time ($r = .35, p < .05$). Mentors' SES was

linked with an increase in the older children's physical self efficacy over time, at trend level ($r = .33$, $p < .10$). If the mentor was of the same race as the mentee, then the mentees' global self-esteem increased on average ($r = .47$, $p < .01$). Finally, the number of times the mentees met was linked with a decline in mentees' likelihood of travel ($r = -.30$, $p < .10$) and the mentors' age was marginally positively related to a decrease over time in mentees' likelihood of travel ($r = -.30$, $p < .10$).

Variable	SEPHYS2	GSE2	ASC2	FARSCHO2	LIKETR2	INTRSTR2
SEPHYS1	.60 ***					
GSE1	.10	.27*				
ASC1	.26*	.14	.49**			
FARSCHO1	-.04	.13	.22+	.40**		
LIKETR1	-.32*	-.01	-.25+	-.09	.45***	
INTRSTR1	-.14	.07	-.18	-.20	.38**	.61***

Table 4: Correlations among Time 1 and Time 2 Outcomes[2]

Discussion

The purpose of this study was to evaluate core features of the DREAM mentoring programme, including whether such features were associated with relevant children's adjustment outcomes. The researchers accordingly investigated potential links between children's physical self-efficacy, self-esteem, academic self-concept, educational expectations, and interest in and likelihood of future travel experiences in relation to their mentors' perceived self-efficacy, perceived organizational skills, and perceptions of DREAM's efficacy (as a composite variable). The expectations were that over time (October to March) there would be positive changes in the mentees' physical self-efficacy, self-esteem, and both academic self-concept and educational expectations as a function of their mentoring experiences. Overall, support for this general set of predictions was found, but only when potential moderators were taken into account. As demonstrated below, the strongest patterning was found for mentees' educational expectations; a pattern brought about perhaps by the fact that the DREAM programme focused on recruitment of current college students as mentors.

Interestingly, the findings illustrated a stronger pattern of hypothesized associations between mentoring and adjustment outcomes for boys than girls. Both higher quality mentoring and a greater frequency of contact with mentors were linked to an increase in global self-worth

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[2] 1 SEPHYS= mentees' physical self -efficacy, GSE=mentees' global self-esteem, ASC= mentees' academic self-concept, FARSCHO= educational expectations, LIKETR=mentees' likelihood of travel, INTRSTR= mentees' interest in travel. The # next to the variable (i.e. 1 or 2) indicates Time 1 or Time 2. + =p<.10,* =p<.05, ** =p.<.01, *** =p<.001

for boys, even when the more stringent partial correlations were run. Interacting with high-SES mentors was also associated with a significant increase in travel interest for boys. None of these relations emerged for girls.

Consistent with results from previous research (Dubois et al., 2002), pairing up with a same-sex mentor in the current study was linked with positive change in outcomes, but only for boys (and younger children, see below). In fact, the findings of this current research indicate that being paired with a same-sex mentor, a practice that is often highly recommended in the mentoring literature (Dubois et al., 2002), was associated with *lower* educational expectations for girls. DREAM organizers do not believe in actively pairing people with same-sex partners. Rather, they match mentors to the mentees who they "hit it off with the most" (Gaines, personal communication, July 2002). For girls who pair up with male mentors, this may be good news in terms of the girls' educational outlooks. While it is unclear exactly why female same-sex dyads had lower educational expectations in this study, there is at least one documented observational study (Bay-Cheng, Lewis, Stewart and Malley, 2006) reporting that same-sex female dyads in a mentoring relationship served to reinforce gender stereotypes. Since traditional gender stereotypes often portray women in the home and not in school, perhaps this is one reason for the reduced educational expectations among girls with female mentors in this sample. Although this intriguing pattern requires replication and further study, the preliminary findings here indicate that, when it comes to enhancing educational hopes and plans, girls may benefit more from being paired with male mentors, just as do boys.

The findings regarding different age groups were more puzzling. On the one hand, younger mentees seemed to benefit in terms of higher educational expectations when they were paired with mentors who matched them on gender. However, younger mentors concomitantly showed *reduced* educational expectations as a function of better quality mentoring and mentoring from more financially well-off mentors. This pattern suggests that perhaps the youngest children in high-risk populations akin to the one sampled here (i.e., primarily rural poverty) may be best served by mentors and role models who come from the same economic background as they do, but who are also matched with them on gender. Given that younger children are less reliant on the peer group for socialization than are adolescents, it is possible that the mentor becomes more of a "parental" figure in the lives of younger mentees. This might also explain why the younger children benefitted from more frequent contact with their mentors, in terms of the children's overall self-esteem. Theses ideas are certainly speculative at this point, however, and require replication and further refinement.

This research also demonstrated relations between mentoring and adjustment for older children. Specifically, there were links between mentors' background features and older children's physical self-efficacy, educational expectations, and likelihood of travel. Unique to the older children, being matched with a higher-SES mentor boded well for the mentees' perceived skill and efficacy at sports over time. Thus the activity-focused mission of DREAM seemed to be enhancing some outcomes for older children. However, both meeting more frequently with

mentors and having an older mentor were associated with a *reduction* in mentees' perceived likelihood of travel over time. Each year the DREAM programme encourages a group of the older children to plan, fundraise, and go on a trip in the summer. As noted, this experience may be positively affecting how the children see themselves in terms of active, physical capacities but the results are less optimistic, at least preliminarily, when considering older children's "realistic" expectations regarding future travel. Perhaps the older children are already able to see that travel options could be closed to them as a function of their economic background and resources. Interestingly, a different pattern might have been obtained should the traveling plans and activities have taken place with younger children. A final association, unique to the older children as well, concerned whether mentees were paired with same-race mentors. Older children felt better about themselves overall at Time 2 when they were paired with a mentor of the same race as them. Indeed, this was the only significant race effect obtained in the study. At this point it is unclear what this association means, especially given the very limited variability regarding race in this sample. Potential race differences with respect to mentoring certainly deserve further study, however.

Limitations and Conclusions

Overall, these results provide some preliminary support for the efforts that the DREAM programme has taken to create an effective mentoring programme. Some of the obtained associations may be attributed to: (1) matching the mentee with the mentor who they enjoy the most (i.e., not necessarily with one who is the same sex); and (2) involving college-aged students who come from relatively high socioeconomic backgrounds and who presumably have the time and flexibility with transportation to consistently devote to a mentee. However, it is important to note that the pattern of significant associations appeared somewhat different for the four groups assessed in this research (i.e., girls and boys, younger and older children). With a bigger sample, it would have been helpful to test for differential patterns in "combined" groupings such as older versus younger girls and/or older versus younger boys. Moreover, potential differences in the quality of training for mentors and mentees, a potential moderating factor in terms of obtained associations in the study, were not assessed.

The interesting pattern of results notwithstanding, it is also important to note additional limitations of this research. First, the major drawback was the lack of a control group—an unfortunate characteristic of this naturalistic, field-based project. The presence of a control group would have allowed the researchers to ascertain that it was DREAM participation per se influencing the children, not some other confounding factor in their lives. In addition, due to the correlational nature of the data, causal conclusions cannot be definitively drawn from this study. Another limitation was that the sample was comprised of mostly Caucasian children and mentors from the New England area. Minority youth did not represent a very large subsample; accordingly, meaningful conclusions could not be drawn regarding the impact of mentoring on minority youth. Finally, the timeframe of this study may not have been long enough to see an even stronger pattern of results. There was not much time for the mentees to "change" and

findings may have been different if the researchers had looked at change in adjustment from Time 1 to the following academic year.

In conclusion, the intriguing pattern of findings, particularly those revealed in the context of partial correlations, indicates that the key features of the DREAM programme (i.e., activity-based curriculum, less formal assignment of mentor-mentee dyads) may be important components to consider in future research and design of mentoring programmes. In addition, such features should be considered in concert with the demographic characteristics that both mentors and mentees bring to the table. Further research is needed to more explicitly identify and test which features of mentoring programmes and relationships work in reducing deleterious outcomes for at-risk youth. This study contributes novel information toward that end.

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Katherine Meyer is a doctoral student in the School of Education at Boston University. Her research focuses on the retention of nontraditional undergraduate students.

Heather Bouchey is currently Assistant Professor of Psychology at the University of Vermont. Her research focuses on adolescent relationship processes and how they influence individual development and adjustment.

Appendix A: Children's self-report measures

Self-Efficacy for Sports and Activities (1 = not at all well, 7 = very well)

How well can you learn sport skills?
How well can you do regular physical education activities?
How well can you learn the skills needed for team sports (for example, basketball, volleyball, swimming, football, soccer)?
How well can you do the kinds of things needed to take part in school plays?

Self-Esteem Scale (1=very true, 4 = not at all true; reverse coded)

I am often disappointed with myself.
I like the way I am leading my life.
I am happy with myself most of the time.
I like the kind of person I am.
I often wish I could be someone else.

Academic competence Scale (1=very true, 4 = not at all true; reverse coded)
I am smart for my age.
I am pretty slow at finishing work in school.
I have trouble figuring out the answers in school.
I am able to learn new material easily in school.
I am an intelligent person.

Educational expectations
Realistically, how far do you think you will go in school? Check only ONE.
   ___Finish junior high school
   ___Finish high school
   ___Finish some college
   ___Finish 2 year college degree
   ___Finish 4 year college degree
   ___Finish graduate degree (M.D. or Ph.D)

Travel (new items)
How interested will you be in traveling to new states and countries after you turn 18?
____Very likely
___Somewhat likely
___Not very likely
___Not at all

Realistically, how likely is it that you will travel to different states and countries after you turn 18?
___Very likely
___Somewhat likely
___Not very likely
___Not at all

Appendix B: Dream Mentor Questionnaire

How much can you do to motivate children who show low interest in group activities?

1	2	3	4	5	6	7
nothing			some influence		a great deal	

How much can you do to get through to the most difficult youth?

1	2	3	4	5	6	7
nothing			some influence		a great deal	

How much can you do to overcome the influence of adverse community conditions on children?

1	2	3	4	5	6	7
nothing			some influence		a great deal	

Overall, how effective do you think the DREAM programme is?

1	2	3	4	5	6	7
not at all			somewhat		extremely	

Overall, how satisfied are you with your experiences in the DREAM programme?

1	2	3	4	5	6	7
not at all			somewhat		extremely	

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How do you feel your ability to plan big trips, to fundraise, and to run a programme increases with time involved in DREAM?

1	2	3	4	5	6	7
not at all			somewhat		extremely	

How do you feel your ability to organize groups of people increases with time involved in DREAM?

1	2	3	4	5	6	7
not at all			somewhat		extremely	

Do you feel more a part of a community while at college as your time with DREAM increases?

1	2	3	4	5	6	7
not at all			somewhat		extremely	